



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re application of:

Reen WU, et al.

Application Serial No. 09/990,613

Filed: November 21, 2001

For: **COMPOSITIONS AND METHODS  
FOR THE ANALYSIS OF MUCIN  
GENE EXPRESSION AND  
IDENTIFICATION OF DRUGS  
HAVING THE ABILITY TO INHIBIT  
MUCIN GENE EXPRESSION**

) Examiner: Li, Qian J.

) Art Unit: 1632

) Attorney's Docket No. 39754-0721A

) **Customer No. 25213**

**EXPRESS MAIL LABEL NO. EV 346 723 887 US**

**Date Mailed: JULY 30, 2003**

**SEQUENCE SUBMISSION STATEMENT**

**Mail Stop Non-Fee Amendment**

Commissioner for Patents

P.O. Box 2327

Arlington, Virginia 22313-1450

Dear Sir:

This is in response to the Office Action, mailed May 6, 2003.

I hereby state that the Sequence Listing information recorded in computer readable form is identical to the written Sequence Listing submitted herewith as required in 37 C.F.R. § 1.821(f) and (g). I further state that these submissions include no new matter.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. **08-1641 (39754-0721A)**

Respectfully submitted,

Dated: July 30, 2003

By:   
Ginger R. Dreger (Reg. No. 33,055)

**HELLER EHRMAN WHITE & McAULIFFE LLP**

275 Middlefield Road

Menlo Park, California 94025

Direct Telephone: (650)-324-7115

Telephone: (650) 324-7000

Facsimile: (650) 324-0638

SV 443603 v1

7/24/03 12:10 PM (39754.0721)



39754-0721A US.txt

SEQUENCE LISTING

<110> WU, Reen  
Chen, Yin

<120> COMPOSITIONS AND METHODS FOR THE  
ANALYSIS OF MUCIN GENE EXPRESSION AND IDENTIFICATION OF  
DRUGS HAVING THE ABILITY TO INHIBIT MUCIN GENE EXPRESSION

<130> 39754-0721A

<140> US 09/990,613

<141> 2001-11-21

<160> 36

<170> FastSEQ for windows Version 4.0

<210> 1

<211> 48

<212> DNA

<213> Homo sapiens

<400> 1

tgtggtcagc tttgtgagga tccaggtcgt ccccggagtg gaggaggg 48

<210> 2

<211> 48

<212> DNA

<213> Homo sapiens

<400> 2

aggggcagaa gttgtgctcg ttgtgggagc aggggttgtg ctggttgt 48

<210> 3

<211> 48

<212> DNA

<213> Homo sapiens

<400> 3

tgtggtcagc tctgtgagga tccaggtcgt ccccggagtg gaggaggg 48

<210> 4

<211> 4180

<212> DNA

<213> Homo sapiens

<400> 4

ggagggcccc cagacctcag tttacccact ggcgacacag gggcgcctgc ctgtgccctc 60  
ccgggcccggg gcaagcagtg gtgggcccag tgggtctcgt gtctggggtc ggtgtgagtt 120  
ccggttctcc aggccttttt ccagacaact gctgggattg gtgggcgaga ccaaggctca 180  
tcaaaggcac agccttgggg gcaggatccc caccatgagt cagaggtagt tctggggagc 240  
ctgggcaggc tgtcacctcc tcagctgtca ggcccagggt cctcatgtgg tccccaggag 300  
aaggggcaga cggccacttc cggccaccag ccagctccct gtgtgcctga ttccgtaaca 360  
tgtcccctgg ctgggcattg actccccaag ttctaattac atgtaactgc agagaagggc 420  
tcagcctggg aaaaggatgg gcataggggg tggttggggg ctggggcctc tgacacagct 480  
ccatgagccc ggccaagagt cccacacaag tcagtggccc ccccggacct tgaaggatcc 540  
cacatcctcc ctgcccttgg ggaggccctt ttctgggggc aggcctggaa gctgccccag 600  
agcttgggcc ccaggaatgg gttggtcctc ccagcgtaac gtgagcctga tcaggcctgg 660  
ggacctgctc agcgggtgtc tgggggcccc tggcgggcta aggagcctga ccagacttgc 720  
ttctggcagg acacccctcc cccggccacc ctgggctcgc ccctctagta gctgcatgtg 780

















<212> DNA  
 <213> Homo sapiens  
  
 <400> 10  
 cagtcacccat gcaggctcgta ga 22  
  
 <210> 11  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 11  
 tcataggtgg agatgtgggc 20  
  
 <210> 12  
 <211> 25  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 12  
 gtggaagggc ttggggggtg atgat 25  
  
 <210> 13  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 13  
 gagaaggcac tgttgggatc gg 22  
  
 <210> 14  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 14  
 tgggcataga actcgttgaa gg 22  
  
 <210> 15  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 15  
 gttgaagtcc ccacacaggc 20  
  
 <210> 16  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 16  
 ggtctggttg gcgtatttgg 20  
  
 <210> 17  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 17  
 ctggggaaga cagtgcagg t 21  
  
 <210> 18

<211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 18  
 cggtggaac aaagctcacg c 21

<210> 19  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 19  
 ctgtggagcc gagctggggg a 21

<210> 20  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an artificial tail

<221> unsure  
 <222> 39  
 <223> v is a or g or c

<400> 20  
 gaccacgcgt atcgatgtcg actttttttt ttttttttv 39

<210> 21  
 <211> 39  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an artificial tail

<221> unsure  
 <222> 39  
 <223> v is a or g or c

<400> 21  
 gaccacgcgt atcgatgtcg acaaaaaaaaa aaaaaaaav 39

<210> 22  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens

<400> 22  
 gtggaagggc ttggggttga tgat 24

<210> 23  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
 gagaaggcac tgttgggatc gg 22

39754-0721A US.txt

<210> 24  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens

<400> 24  
 gggcccacat ctccacctat 20

<210> 25  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an engineered terminal restriction site

<400> 25  
 aaggatccgg gtgcttgctc ccctgg 26

<210> 26  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an engineered terminal restriction site

<400> 26  
 aagctagcgc cacggagcat tcagg 25

<210> 27  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an engineered terminal restriction site

<400> 27  
 aaggatccgg gtgcttgctc ccctgg 26

<210> 28  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence  
 and an engineered terminal restriction site

<400> 28  
 aagctagcct gggttgctc gtcgctca 28

<210> 29  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic primer comprising Homo sapiens sequence

and an engineered terminal restriction site

<400> 29  
aaagatctcc aaattccagc ccctccag 28

<210> 30  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic primer comprising Homo sapiens sequence  
and an engineered terminal restriction site

<400> 30  
aagctagcca ggggagcaag cacc 25

<210> 31  
<211> 1105  
<212> DNA  
<213> Homo sapiens

<400> 31  
gcgccacgga gcattcagga cgctgggtgac cagggagcca ggaggtggga gcatctgagg 60  
tgcaggtcac acgggcagga ggtgtttgca agaggtattg cagcgcggaac ggagtgtcct 120  
gcagatgacg ctgtctgtcc tgtagatgac gctcgtcaag gaggtttacc acatagcccc 180  
cgggaagccc acccaacacc agccggaggt gctaggcttc tgcggctccc acctggggca 240  
ggcggaggac cccgggcagg tccaggaccc cccggagcag ctgcttcctc aaccctgcca 300  
gggttaatga ggaggcccca gagtgagggt gaggccaaat gggactcagg gccggagcct 360  
ctggcctggc tggatcaggg ctggcattgg acaagcgag ctgactcccg atgtgcatgg 420  
ccaggagaca ctctgggcct cagtttcccc ttgaatgtga acctgaaac agatcagccc 480  
agagcactcc cacggtcttc aaggggctct ggtcagctgg gctggggctc ctggaaatag 540  
agcctcctcc agggaccccc acaagccacc cagactgagc atcctggcca tgtgcatgcc 600  
tgagctcagc aggagcctgc cgggctcccc gtgggctaag cagtgggtgg aggggagctc 660  
cagcctcgtg ggccctgccc gggcctcggg gacccatggg cagtggctgg ggggtgctgcc 720  
cagaggctgg gattcccttc cagcaggagc cgcagtgggg ctgagtgtga ggcaggctgg 780  
ctgaccactg ttcccatgga ccctgcgtcc aaggccagcc ctgccttcca gcggctttgc 840  
catctaggac ggggtgccagg tggggtaggc ccttctctcc cttccgattc tcagaagctg 900  
ctgggggtgg gggcgtcctg ggcctcaggg cacagagctg caaatccttc ctgatccagg 960  
cctctccctt gccacagccc ctccccgaga gcaaacacac gtggctggag cggggaagag 1020  
cacggtgccc tgcgtggcct ggcctggcct ggggccaagg ctccctgcta cataagctgg 1080  
ggcccccagg ggagcaagca cccgg 1105

<210> 32  
<211> 4176  
<212> DNA  
<213> Homo sapiens

<400> 32  
cctggttggt cctgtcgctc agtggggcag ggtctaaggg ctgtgaagac tcaacatgcc 60  
cccacctgct acttctgaac accaggcact ggctctgaga ccccgggcc ttgctggaca 120  
tctccccagg tgtactgggc caggggacag gggcctggcc atcccaacac ccaggagcaa 180  
gcagcccgtc acctgcccag gtccccgagg cccggaacac cttcctgctg ggcccaccca 240  
gccctggacc tgtcccgtt ggtcacacga tgggaccctc ggcccatcag caggtgagcc 300  
cccaggagcg tgcgtctggc ctggtaaggc ctccaccca ggagttgggg ggccccctg 360  
ccagggagca ggaggctgcc gaggtggagg gtccacaca gctaccactc cctatcccca 420  
gcacagcctg gggcctggct ctgagtacac atcctggggc ctggctctga gcagaccaag 480  
agcccatccc tgctttgtga cccctgggc tgtgcctgac accccagggt tccagcgtgg 540  
agctggggcc cagctcagtg cctgggagct gatggaccct gggggccggc tcagtgcctg 600  
gtggctgatg gacactgggg cctggctcaa acctgcaccg ctgtggctcg gggaggggag 660  
ggctgagcca cgtggggaac ccagccccag tgacgactct ttgcgggtgg caagccctcc 720  
aggtgtcccc cagggtgag gggctgggt tggggcagct ggtgacagca gatggtggcc 780  
ctgatcactg gtgcctggac ggcctctgaa ggggtctgtg gggctcctga cgggtcccca 840





## 39754-0721A US.txt

```

gaggggacgt tgagtcctac gataagatca gggccgctgg agggcactta tgccagcagc 660
ctaaggacat agagtgccag gccgagagct tccccaactg gaccctggca caggtggggc 720
agaagggtgca ctgtgacgtc cacttcggcc tgggtgtgag gaactgggag caggagggcg 780
tcttcaagat gtgctacaac tacaggatc          809

```

```

<210> 35
<211> 2143
<212> DNA
<213> homo sapiens

```

```

<400> 35
tgtgccctga gttaaagaaa ccgtcacaaa gaacaaaggg agaaggcggg ttccagcctg 60
caccacagcc ctgcgctctt gaggagccac ctgggggctt cagccatgag ggggtgacagg 120
tggcaaaacg ggccagctcc gtacacgtcg ctgtgcagct gtctccggcc ctccatctcc 180
agaacgttct cacattccca agctgaaacc ctgtcccat gcaacaccag ctcaccatcc 240
cctctgccag cccctggcgc ccaccgtcca cactccgtct ctgcgggttt catgactcca 300
ggggcagcac acgagtggcc cctcctgcct ttgtcctctg tgtccacctg cctcactctg 360
cacagtgtcc ccagcttccc ccatggagca gcctgggcca gcccctcctt ttcacggctg 420
aaccgtattc caccgcacgg atcagcctca cgatgctgac ccagtcctcc gcccagggac 480
acatgggcag cttctgccct ttgtcagtga tgctgctgtg gacatgggtg tgcaaattgc 540
cctcaggacc cgccttcagt tcttctgggg acagaccag agtgagttg ctggtcaccc 600
ccaccagcag ggcacagggc tccgggtccc cacgtctctg ccaacacttc ctacttctctg 660
tgtttcttga tccccgccat cctattgagc gtgagacagg tcagaagctt tgaagatggg 720
ctttcgtctt gtcccagaaa tcccacctct aagaatttaa cttcagaaa acaaacgcgg 780
gggagctggg gcaggggccc tgacggggac tgtgacgtaa ataaaacaac agacctggac 840
accaccctag ggtcccatg gggccggacg agggcacacc accgacctg tgcttctctg 900
ctggcgtctg gcgcacggag cattcaggac gctggtgacc agggagccag gaggtgggag 960
catctgaggt gcaggtcaca cgggcaggag gtgtttgcaa gaggtattgc agcgcgagc 1020
gagtgtcctg cagatgacgc tgtctgtcct gtagatgacg ctctcaagg aggtttacca 1080
catagcccc gggaaagcca cccaacacca gccggagggt ctaggcttct gcggctccca 1140
cctggggcag gcggaggacc ccgggcagggt ccaggacccc ccggagcagc tgcttctctca 1200
accctgccag ggttaattgag gagggcccag agtgaggtg agggcaaatt ggactcaggg 1260
ccggagcctc tggcctgggt ggatcagggc tggcattgga caagcgcagc tgactcccga 1320
tgtgcatggc caggagacac tctgggcctc agtttccctt tgaatgtgaa ccttgaaaca 1380
gatcagccca gagacctccc acggtcttca aggggctctg gtcagctggg ctgggggtctc 1440
tggaaataga gcctcctcca gggaccccc caagccaccc agactgagca tcctggccat 1500
gtgcatgcct gagctcagca ggagcctgcc gggctcccc tgggctaagc agtgggtggga 1560
ggggagctcc agcctcgtgg gccctgccc ggcctcgggg acccatggtc agtggctggg 1620
gggtgtgccc agaggctggg attcccttcc agcaggagcc gcagtggggc tgagtgtgag 1680
gcaggctggc tgaccactgt ttccatggac cctgcgtcca aggccagccc tgccttccag 1740
cggctttgcc atctaggacg ggtgccagggt ggggtaggcc cttctctccc ttccgattct 1800
cagaagctgc tgggggtggg ggcgtcctgg gcctcagggc acagagctgc aaatccttcc 1860
tgatccaggc ctctccccct ccacagccc tccccgagag caaacacacg tggctggagc 1920
ggggaagagc acggtgccc gtgtggcctg gcctggcctt gggccaaggc tccctgctac 1980
ataagctggg gccccaggg gagcaagcac ccggcccggc tccctcctctg cccgtccccg 2040
tccccccacc cgtgccagcc cccaggatgg gtgccccgag cgcgtgccgg acgctgggtg 2100
tggctctggc ggccatgctc gtggtgccgc aggcagagac cca          2143

```

```

<210> 36
<211> 25
<212> PRT
<213> Homo sapiens

```

```

<400> 36
Met Gly Ala Pro Ser Ala Cys Arg Thr Leu Val Leu Ala Leu Ala Ala
1          5          10          15
Met Leu Val Val Pro Gln Ala Glu Thr
20          25

```